

U. S. DEPARTMENT OF COMMERCE
Environmental Science Services Administration

In cooperation with
Cotton Economic Research and
Bureau of Business Research of
The University of Texas at Austin

CLIMATOGRAPHY OF THE UNITED STATES NO. 20-41

LATITUDE 33° 5' N
LONGITUDE 97° 34' W
ELEV. (GROUND) 730 ft.

STATION BOYD, TEXAS

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD 1947-1967

Month	Temperature (°F) #								* Mean degree days	Precipitation Totals (Inches)								Mean number of days					
	Means			Extremes			Mean	Greatest daily		Snow, Sleet						Temperatures							
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest		Year	Mean	Year	Maximum monthly	Year	Greatest Depth	Year	Precip. 10 inch or more	90° and above	32° and below	32° and below	0° and below	Month	Max.	Min.	
(a)	11	11	11	11	1967	0	10	10	21	19	1965	1.5	9.0	1964	9	1964	3	0	2	23	*	Jan	
Jan	53.5	26.6	40.1	81	1967	0	1964	766	1.50	1.71	1948	0.6	2.5	1951	1	1966+	4	0	1	17	0	Feb	
Feb	57.8	30.9	44.4	88	1963	13	1960+	577	1.74	3.00	1958	*	0.8	1964	0		5	*	*	10	0	Mar	
Mar	65.8	38.8	52.3	93	1967	14	1962	405	1.92	2.00	1964	0	0	0	0		5	1	0	1	0	Apr	
Apr	76.3	52.0	64.2	97	1963	27	1962	113	3.85	4.70	1965	0	0	0	0		5	5	0	0	0	May	
May	82.4	61.2	71.8	102	1967	36	1960	25	4.53	3.49	1964	0	0	0	0		5	19	0	0	0	Jun	
Jun	90.2	68.8	79.5	104	1959	50	1964	1	2.79	2.40	1961	0	0	0	0		4	28	0	0	0	Jul	
Jul	96.2	72.7	84.5	107	1964	58	1967	0	2.33	7.65	1950	0	0	0	0		3	27	0	0	0	Aug	
Aug	95.8	70.7	83.3	108	1964	51	1967	*	1.59	2.05	1950	0	0	0	0		5	14	0	0	0	Sep	
Sep	87.7	64.3	76.0	104	1964	41	1963	5	2.77	3.90	1962	0	0	0	0		4	3	0	1	0	Oct	
Oct	78.0	51.1	64.6	97	1963	26	1957	109	2.51	6.38	1959	0	0	0	0		4	0	0	8	0	Nov	
Nov	66.9	40.8	53.9	88	1965+	17	1959	345	1.99	2.76	1964	*	0.5	1958	0		4	0	*	18	0	Dec	
Dec	56.5	31.5	44.0	84	1966	9	1963	644	1.61	2.80	1956	0.3	5.0	1958	1	1963	4	0	*	18	0		
Year	75.6	50.8	63.2	108	Aug. 1964	0	Jan. 1964	2990	29.13	7.65	Jul. 1950	2.4	9.0	Jan. 1964	9	Jan. 1964	51	97	3	78	*	Year	

(a) Average length of record, years.

-T Trace, an amount too small to measure.

** Base 65°F

+ Also on earlier dates, months, or years.

* Less than one half.

Period of record 1957-1967.

THE CLIMATE OF BOYD (WISE COUNTY) TEXAS

Boyd is located near the Trinity River, in southeast Wise County, about 27 miles north-northwest of Fort Worth. The surrounding area is rolling prairie cut by the Trinity. Soils are mostly clay, black loam, sandy, and alluvial types.

The climate of Boyd is subtropical with dry winters and hot humid summers. The annual range in temperature is extreme, characteristic of a continental environment. Tropical Maritime air masses largely control the climate from late spring through early fall, while Polar air masses determine the winter climate. The average total annual rainfall, based on the 21-year period, 1947-1967, is 29.13 inches. This period of record is too short to establish a reliable estimate of the true mean. On the basis of data from surrounding stations with longer periods of record, the 1931-1960 "normal" annual precipitation for Boyd is estimated at 32 inches. Monthly and annual total precipitation amounts are quite variable. The wettest year on record has been 1957, when a total of 48.68 inches fell. The driest year occurred three years earlier, in 1954, when only 18.47 inches were recorded. The prevailing winds are southerly throughout the year, even in winter. The area receives approximately 67 percent of the total possible sunshine annually. There is little seasonal variation in the relative humidity, but diurnally, the variation is significant. The mean annual relative humidity is 79 percent at 6:00 a.m., 53 percent at noon, and 49 percent at 6:00 p.m., Central Standard Time.

Winter: Surges of cold Polar Canadian air masses bring sudden drops in temperature, but on the whole, winters are relatively mild. "Northerns" occur three to four times a month. Freezing temperatures

occur on about 9 out of 10 nights, with the majority of such periods limited to a few hours just before sunrise. Even in January and February cold spells are brief, and fair mild weather occurs often. Snowfall averages 2.4 inches annually, but this mean value does not furnish a reliable estimate of expected seasonal snowfall, as it is unduly biased by rare, exceptionally heavy snows that may occur once in 10 to 15 years. Winter is relatively dry, with the least precipitation of all seasons. Cloudiness is most prevalent in winter, but the area continues to receive about 55 percent of the total possible sunshine during these months.

Summer days are hot, particularly those of July and August. Thunderstorms and an occasional cool front bring a variety of weather during June, but both July and August are hot, dry months that offer little change in the day-to-day weather sequence. Daily temperature maxima of 100°F or above are not uncommon; however, the relative humidity is usually low during the hottest spells, and evaporative type air-conditioners operate effectively about 80 percent of the time.

Spring and fall, which have moderate temperatures, are the most pleasant seasons. The weather is more restless in early spring with warm and cool spells of short duration, and March and April are the windiest months of the year. Thunderstorms occur with greatest frequency in April and May, occurring on an average of seven days each month. In the fall, wind speeds are most often light, and periods of sunny, dry weather are frequent.

BOYD, TEXAS

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1957	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	41.4	40.6	46.7	60.7	71.1	81.1	84.2	83.8	73.6	60.4	49.6	48.9	-
1959	39.2	45.5	51.9	60.7	74.0	79.5	81.1	83.1	78.6	62.2	46.4	47.8	62.5
1960	41.6	40.8	46.0	65.0	69.5	81.7	83.3	78.0	68.3	55.5	40.6	62.8	72.2
1961	38.0	48.2	56.9	62.4	72.2	78.2	81.2	81.9	75.5	65.8	51.6	62.9	72.2
1962	36.1	52.0	50.5	61.3	76.1	78.0	84.0	83.4	76.3	69.1	53.2	45.6	63.8
1963	-	-	-	-	-	-	-	-	-	-	-	-	-
1964	41.1	41.1	43.5	57.6	68.7	72.6	80.9	86.3	78.5	71.6	55.7	37.3	64.5
1965	45.8	43.7	45.3	67.1	66.1	72.8	79.0	86.7	84.3	76.4	61.7	56.7	64.8
1966	38.2	43.3	54.9	61.9	77.8	79.3	85.0	82.1	77.7	62.8	59.6	48.5	64.1
1967	44.1	61.1	68.7	69.3	80.3	81.5	82.2	72.3	63.8	52.3	43.7	33.6	52.3

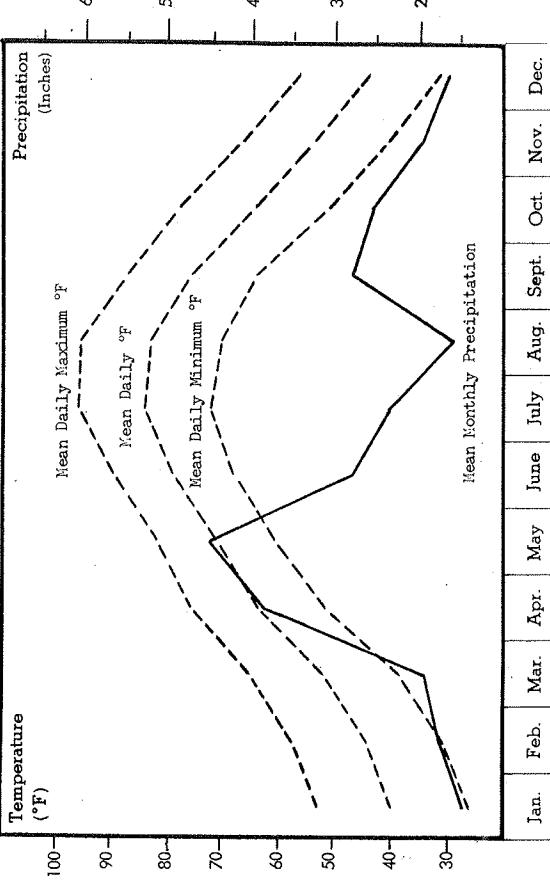
STATION HISTORY

A rainfall station was established at Rhone, Texas, on August 22, 1946. On January 27, 1947, it was moved 3.2 miles west-northwest, near the Trinity River, at a location 1.75 miles east-southeast of Boyd, and the name of the station was changed to Boyd. The station was moved again, one mile southeast, or 2.8 miles southeast of Boyd, on March 1, 1947, then into Boyd on July 10, 1948, where it was located at the telephone company office, 150 feet west of the post office building. A second weather station, instrumented to study atmospheric conditions associated with severe storms, was established three miles southeast of Boyd on February 1, 1957. The equipment consisted of a recording雨量計, hygrothermograph, and microbarograph. On April 18, 1957 the station three miles southeast of Boyd was made a complete class "A" climatological network station, equipped with a cotton region shelter, maximum and minimum thermometers, and standard eight-inch rain gage. Publication of precipitation and temperature data from this location was begun in CLIMATOLOGICAL DATA-TEXAS under the name, Boyd 3SE, index number, 41-0996-03. The special meteorological project equipment (hygrothermograph, barograph, and recording rain gage) was removed on November 18, 1963. The station is located at the home of the Cooperative Observer, Mrs. Francis I. Willbanks.

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1947	-	-	-	-	-	-	-	-	-	-	-	-	-
1948	-	-	-	-	-	-	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-	-	-	-	-	-	-
1950	2.44	2.01	0.29	5.11	7.32	4.25	10.59	4.13	3.31	0.30	0.02	0.10	39.82
1951	0.30	2.48	1.04	3.81	4.15	4.87	4.56	0.10	1.29	1.97	2.75	1.15	21.56
1952	0.63	1.45	1.59	4.87	4.56	0.10	0.29	0.93	1.31	0.22	5.50	1.97	23.22
1953	0.50	1.00	2.47	3.56	4.07	0.84	1.91	1.51	1.21	3.00	1.80	0.87	27.74
1954	2.62	0.29	0.37	2.80	3.68	1.16	1.82	0.19	0.31	2.60	1.14	1.69	21.62
1955	1.38	0.51	1.11	2.37	5.70	5.32	0.47	0.35	1.99	0.62	0	0.80	21.62
1956	1.29	2.57	0.62	2.81	3.31	2.06	0.52	1.05	0.81	3.29	1.89	4.39	24.44
1957	0.68	4.00	2.63	12.13	11.53	2.89	0.97	0.20	3.93	3.68	1.16	48.68	-
1958	1.91	0.67	4.71	5.06	3.09	0.79	2.88	2.81	1.31	1.25	0.86	27.58	-
1959	1.7	0.78	2.15	1.01	2.15	1.01	2.15	1.58	1.58	0.80	0.75	2.62	31.97
1960	3.39	1.18	0.78	0.15	2.10	2.10	4.15	1.15	1.15	1.15	0.23	3.51	24.41
1961	3.54	2.36	3.50	0.18	2.22	6.50	2.35	0.18	2.93	2.14	2.88	1.73	30.48
1962	0.35	1.50	2.43	5.57	0.55	4.62	7.01	1.47	8.48	2.81	2.99	0.99	38.77
1963	0.21	0.02	6.49	6.49	0.21	0.02	4.98	4.98	4.98	2.40	1.04	1.55	1.03
1964	3.50	1.08	3.78	4.83	3.78	2.15	5.29	5.29	5.29	7.63	0.93	43.73	-
1965	2.62	2.77	0.66	1.94	2.77	0.66	1.41	1.41	1.41	3.35	5.48	1.15	29.20
1966	1.67	2.66	2.32	2.96	2.66	0.75	3.23	3.23	3.23	0.93	0.55	1.59	32.42
1967	0	0.70	1.99	2.71	5.37	2.39	1.55	0.19	5.46	1.49	1.28	-	-

Temperature and Precipitation



Single copies of this summary are available without charge from the Bureau of Business Research, The University of Texas, Austin, Texas 78712. Quantity rates upon request.

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